

Please note that this draft proposed regulation is for preliminary review by the public as ARB considers revisions based on stakeholder comments and additional data.

## **DRAFT Proposed Regulation Order**

### **REGULATION FOR MANAGEMENT OF HIGH GLOBAL WARMING POTENTIAL REFRIGERANTS**

Adopt new Subchapter 10, Article X, sections 9XXXX to 9XXXX, title 17, California Code of Regulations, to read as follows:

#### **Article X: MANAGEMENT OF HIGH-GWP REFRIGERANTS**

##### **§ 9XXX0. Purpose**

The purpose of this regulation is to reduce emissions of refrigerants with high global warming potential from stationary refrigeration and air-conditioning systems by requiring persons subject to this rule to reclaim, recover, or recycle refrigerant; and to properly repair refrigeration and air-conditioning equipment or to replace old equipment with new equipment.

##### **§ 9XXX1. Applicability**

This rule is applicable to a person who owns or operates a stationary refrigeration or air-conditioning system, as defined in this rule. This rule is also applicable to a person who installs, repairs, maintains, services, replaces, recycles, or disposes of a stationary refrigeration or air-conditioning system, and to any person who sells refrigerant.

##### **§ 9XXX2. Definitions**

(a) For the purposes of this article, the following definitions shall apply:

(1) “Additional Refrigerant Charge” means the quantity, in pounds, of refrigerant added to a refrigeration or air-conditioning system in order to bring the system to a full charge and replace refrigerant which has leaked.

(2) “Air-conditioning System” means any stationary equipment that holds more than 50 pounds of any combination of high-GWP refrigerant that is intended or installed for the purpose of providing cooling in order to control heat or humidity in facilities including, but not limited to, warehouses, commercial buildings, institutions, and computer rooms.

(3) “Air District” means an Air Quality Management District or Air Pollution Control District created or continued in existence under Health and Safety Code sections 40000-41357.

(4) “Air Pollution Control Officer” or “APCO” means the appointed head of an Air Quality Management District or Air Pollution District whose appointment and duties are set forth in Health and Safety Code sections 40750-40753.

(5) “AHRI” means the Air-Conditioning, Heating and Refrigeration Institute.

(6) “ASHRAE” means the American Society of Heating, Refrigerating and Air-Conditioning Engineers.

(7) “Audit” means an inspection of a refrigeration or air-conditioning system containing refrigerants conducted to:

(A) Identify leaks pursuant to a Section 9XXX3(a), and

(B) Ensure proper operation pursuant to manufacturer's instructions/specifications.

(8) “Automatic Leak Detection System” means a calibrated mechanical, electrical, or electronic device using continuous monitoring for detecting leakage of refrigerants that on detection, alerts the operator, and may be either:

(A) A direct system that automatically detects the presence of refrigerant leaked from a refrigeration or air-conditioning system; or

(B) An indirect system that automatically interprets measurements within a refrigeration or air-conditioning system that indicate a refrigerant leak (e.g., in refrigerated cases and other locations in the system.) and alerts the operator to the presence of refrigerant leaks.

(9) “Certified Reclaimer” means a person who holds a current, valid, and applicable reclaimer certificate issued by the US EPA in accordance with Part 82 of Title 40 of the Code of Federal Regulations.

(10) “Certified Refrigerant Recovery or Recycling Equipment” means any refrigerant recovery or recycling equipment that meets the standards of Title 40 of the Code of Federal Regulation, Part 82, §82.158(c), (e), or (g); equipment certified by an approved equipment testing organization to meet the standards in §82.158(b), (d), or (f); or equipment certified pursuant to §82.36(a).

(11) “Certified Technician” means a person who holds a current, valid, and applicable certificate issued by the US EPA in accordance with Title 40 of the Code of Federal Regulations, Part 82, Subpart B (Standards for Motor Vehicle Service) or Subpart F (Standards for Stationary AC/Refrigerant Service).

(12) “Chlorofluorocarbon” or “CFC” means a class of compounds consisting of chlorine, fluorine, and carbon.

(13) “Comfort Cooling” means air-conditioning that is intended to provide cooling in order to control heat or humidity in facilities, including, but not limited to, warehouses, commercial buildings, institutions, and computer rooms.

(14) “Component” means a part of a refrigeration or air-conditioning system including, but not limited to, compressor, condenser, evaporator, receiver, and all of its connections and subassemblies, without which the appliance will not properly function or will be subject to failures.

(15) “Continuous Monitoring” means measuring the ambient concentration of refrigerant using electronic or mechanical sensors in real time.

(16) “Executive Officer” means the Executive Officer of the California Air Resources Board, or his or her delegate.

(17) “Follow-up Verification Test” means a test that validates the effectiveness of repairs to a refrigeration or air-conditioning system performed within 30 days of the completion of the repair and the system’s return to normal operating characteristics and conditions. A follow-up verification test includes, but is not limited to, the use of soap bubbles, electronic or ultrasonic leak detectors, pressure or vacuum tests, fluorescent dye and black light, infrared or near infrared tests, or handheld gas detection devices.

(18) “Full Charge” means the amount of refrigerant required for normal operating characteristics and conditions of a refrigeration or air-conditioning system as determined by using one of the following four methods:

(A) Use of the equipment manufacturer's specifications of the full charge;

(B) Use of calculations based on component sizes, density of refrigerant, volume of piping, seasonal variances, and other relevant considerations; or

(C) The midpoint of an established range for refrigerant charge based on the best available data regarding the normal operating characteristics and conditions for the system.

(19) “Global Warming Potential” or “GWP” means the total contribution to global warming resulting from the emission of one unit of a specific gas relative to one unit of the reference gas, carbon dioxide.

(20) “High-GWP Refrigerant” or “Refrigerant” means a compound used as a heat transfer fluid or gas in a refrigeration or air-conditioning system that is a chlorofluorocarbon, hydrochlorofluorocarbon, a hydrofluorocarbon, a perfluorocarbon, or any blend containing these compounds, with a GWP equal to or greater than 150.

(21) “Hydrochlorofluorocarbon” or “HCFC” means a class of gases primarily used as refrigerants, consisting of hydrogen, chlorine, fluorine, and carbon.

(22) “Hydrofluorocarbon” or “HFC” means a class of gases primarily used as refrigerants, consisting of hydrogen, fluorine, and carbon.

(23) “Initial Verification Test” means a leak test that validates the effectiveness of repairs to a refrigeration or air-conditioning system that is conducted as soon as practicable after a repair of a refrigeration or air-conditioning system. When leak repairs require the evacuation of the refrigerant from the refrigeration or air-conditioning system, or a portion of the refrigeration or air-conditioning system, initial verification test means a test conducted prior to the replacement

of the full refrigerant charge and before the air-conditioning or refrigeration system, or portion of the system, has reached operation at normal operating characteristics and conditions. When repairs do not require the evacuation of refrigerant, initial verification test means a test conducted as soon as practicable after the conclusion of the repair work.

(24) “Non-refillable cylinder” means a cylinder that is designed not to be refilled and is used in the servicing, maintenance or filling of a refrigeration or air-conditioning system, any refrigeration or comfort cooling appliance, motor vehicle air-conditioning system, or heat pump equipment.

(25) “Normal Operating Characteristics and Conditions” means a refrigeration or air-conditioning system operating temperatures, pressures, fluid flows, speeds, and other characteristics, including full charge of the air-conditioning or refrigeration system that would be expected for a given process load and ambient condition during operation. Normal operating characteristics and conditions are marked by the absence of atypical conditions affecting the operation of the refrigeration or air-conditioning system.

(26) “Perfluorocarbon” or “PFC” means a class of chemical consisting only of carbon and fluorine.

(27) “Person” means any person, firm, association, organization, partnership, business trust, corporation, limited liability company, company, federal, state, or local governmental agency or public district.

(28) “Reclaim” means to process refrigerant to a level equivalent to new product specifications in accordance with the ARI 700 Standard.

(29) “Recover” means to remove refrigerant, in any condition, from a system and to store it in an external container without necessarily testing or processing it in any way.

(30) “Recycle” means to clean refrigerant for reuse by oil separation and single or multiple passes through moisture-absorption devices, such as replaceable core filter-driers that reduce moisture, acidity, and particulate matter.

(31) “Refillable cylinder” means a cylinder that is designed to be refilled and is used in the servicing, maintenance or filling of a refrigeration or air-conditioning system, motor vehicle air-conditioning system, or, heat pump equipment.

(32) “Refrigerant Circuit” means the parts of an appliance that are normally connected to each other (or are separated only by internal valves) and are designed to contain refrigerant.

(33) “Refrigerant Distributor” means a person that distributes refrigerant to retailers or to industrial, commercial, institutional or professional users. “Refrigerant Distributor” includes any person who imports refrigerant from outside of this state for sale to retailers or to industrial, commercial, institutional or professional users.

(34) “Refrigerant Leak” means any discharge of refrigerant from a refrigeration or air-conditioning system or certified refrigerant recovery or recycling equipment into the atmosphere.

(35) “Refrigeration System” means stationary equipment used for cooling or freezing that holds more than 50 pounds of high-GWP refrigerant in any combination, including, but not limited to, refrigerators and freezers; industrial process refrigeration equipment used in chemical,

pharmaceutical, petrochemical, food or beverage manufacturing; packaging or processing; power generation; and industrial ice manufacturing industries; and components and connections.

(36) “Refrigerant Wholesaler” means a person that provides a full range of refrigerant services including selling to retailers, to industrial, commercial, institutional or professional users, or to other wholesalers, or acts as an agent or broker in buying refrigerant. “Refrigerant Wholesaler” includes any person who imports refrigerant from outside of this state for sale to retailers, to industrial, commercial, institutional or professional users, or to other wholesalers, or to act as an agent or broker in buying refrigerant.

(37) “Retire” means the permanent removal from service of a refrigeration or air-conditioning system rendering it unfit for use by the current or any future owner or operator.

(38) “Retrofit” means the replacement of a refrigeration or air-conditioning system, upgrade of a refrigeration or air-conditioning system or major repairs of a refrigeration or air-conditioning. Retrofit includes, but is not limited to, the following: changes in refrigerant used or changes in lubricants, gaskets, filters, driers, valves, o-rings or other components.

(39) “Seasonal Adjustment” means the need to add refrigerant to a refrigeration or air-conditioning system due to a change in ambient conditions caused by a change in season, followed by the subsequent removal of refrigerant in the corresponding change in season, where both the addition and removal of refrigerant occurs within one consecutive 12-month period.

(40) “System Mothballing” means the intentional shutting down of a refrigeration or air-conditioning system for an extended period of time by the owners or operators of that facility, where the refrigerant has been evacuated from the refrigeration or air-conditioning system or the



affected component of the refrigeration or air-conditioning system, at least to atmospheric pressure.

(41) “Topping Off” means adding refrigerant to a refrigeration or air-conditioning system in order to bring the system to a full charge.

(42) “US EPA” means the United States Environmental Protection Agency.

### **§ 9XXX3. General Requirements for Stationary Refrigeration and Air-Conditioning System Registration and Leak Repair**

#### **(a) Registration for Operation**

(1) By January 31, 2010, the owner or operator of an existing stationary refrigeration or air-conditioning system with a full charge greater than or equal to 2000 pounds of high-GWP refrigerant must register to operate with the local Air District or the Executive Officer.

(2) By January 31, 2012, the owner or operator of an existing stationary refrigeration or air-conditioning system with a full charge greater than or equal to 200 pounds, but less than 2000 pounds, of high-GWP refrigerant must register to operate with the local Air District or the Executive Officer.

(3) By January 31, 2014, the owner or operator of an existing stationary refrigeration or air-conditioning system with a full charge greater than or equal to 50 pounds, but less than 200 pounds, of high-GWP refrigerant must register to operate with the local Air District or the Executive Officer.

(4) On or after January 31, 2010, the owner or operator of a new stationary refrigeration or air-conditioning system with a full charge greater than or equal to 50 pounds of high-GWP refrigerant must register to operate with the local Air District or the Executive Officer.

(5) At minimum the information provided to register to operate must include, but is not limited to, the following:

(A) Facility information

1. Name of operator
2. Name of facility, including a facility identifier such as store number
3. Facility identifier provided by Executive Officer or the local Air District.
4. Facility contact person
5. Facility contact person phone number
6. Facility contact person E-mail address

(B) Refrigeration and Air-Conditioning System Equipment Information

1. Equipment type
2. Equipment manufacturer
3. Equipment model or description
4. Equipment serial number: The serial number(s) of the affected equipment or component must be recorded when present and accessible. When the effected equipment or component is part of an assembly without serial number or does not have an individual serial number or is not accessible after assembly, the physical location of the effected equipment must be recorded in enough detail to permit positive identification.
5. Physical location of a refrigeration or air-conditioning system (e.g. simple schematic/floor plan with equipment locations clearly noted).
6. Temperature classification – identify equipment as a low temperature system, a medium temperature system, or other

7. Total refrigerant charge

8. Monthly refrigerant charge – report the amount of monthly additional refrigerant charge for the most recent calendar year, if an existing system.

(6) A person registering to operate as described in subsection (a) of this section for a facility must provide payment according to the fee schedule established by the local Air District or the Executive Officer.

**(b) Leak Detection and Monitoring**

(1) By January 31, 2010, owners or operators of a stationary refrigeration or air-conditioning system with a full charge greater than or equal to 2000 pounds of high-GWP refrigerant, and which operates, or is intended to be operated year-round must have an automatic leak detection system.

(2) After January 31, 2012, owners or operators of a stationary refrigeration system with a full charge greater than or equal to 200 pounds, but less than 2000 pounds, of high-GWP refrigerant, which operates, or is intended to be operated year-round, or a stationary air-conditioning system, with a full charge greater than or equal to 200 pounds, but less than 2000 pounds, of high-GWP refrigerant, must conduct a leak inspection of the refrigeration or air-conditioning system quarterly using a calibrated mechanical, electrical, or electronic device; bubble test; or observation of oil residue. Observation of oil residue must be confirmed by a calibrated mechanical, electrical, or electronic device or bubble test. A quarterly leak inspection of the refrigeration or air-conditioning system is not required if the refrigeration or air-conditioning system uses an automatic leak detection system.

(3) After January 31, 2014, owners or operators of a stationary refrigeration system with a full charge greater than or equal to 50 pounds, but less than 200 pounds, of high-GWP refrigerant, and which operates, or is intended to be operated year-round, or a stationary air-conditioning system with a full charge greater than or equal to 50 pounds, but less

than 200 pounds, of high-GWP refrigerant, must conduct a leak inspection of the refrigeration or air-conditioning system annually using a calibrated mechanical, electrical, or electronic device; bubble test; or observation of oil residue. Observation of oil residue must be confirmed by a calibrated mechanical, electrical, or electronic device or bubble test. A once per year leak inspection of the refrigeration or air-conditioning system is not required if the refrigeration or air-conditioning system uses an automatic leak detection system.

(4) A facility that installs an automatic leak detection system must place sensors or intakes such that they will measure the refrigerant concentrations in air in proximity to principal components of the refrigeration or air-conditioning system such that areas of the system most likely to leak are monitored. Continuous monitoring must be conducted, at a minimum, but not limited to, in the proximity of the compressor, evaporator, condenser, and other areas of high potential for refrigerant leaks; except in systems in which these components are combined.

(5) All automatic leak detection systems must be audited and calibrated at least annually using manufacturer recommended procedures.

(6) Any stationary refrigeration system that does not operate, or is not intended to operate year-round upon initiating each operation of the refrigeration system must conduct a leak inspection using a calibrated mechanical, electrical, or electronic device; bubble test; or observation of oil residue. Observation of oil residue must be confirmed by a calibrated mechanical, electrical, or electronic device or bubble test.

### **(c) Leak Repair**

(1) The owner or operator of a stationary refrigeration or air-conditioning system must repair any leak and maintain records of refrigerant leak repairs.

(A) A refrigerant leak must be repaired within 14 days of leak detection, as evident by the need to add refrigerant or detected by an automatic leak detection system.

(B) The owner or operator must conduct an initial verification test upon completion of repairs when the system is operating at normal conditions.

(C) The owner or operator of a refrigeration or air-conditioning system must conduct a follow-up verification test on the complete refrigeration or air-conditioning system. The follow-up verification test must be conducted at normal operating characteristics and conditions.

(2) If either the initial or follow-up verification test indicate that the repairs have not been successful, meaning that leaks are still occurring within the refrigeration or air-conditioning system or component(s) requiring repair, the owner or operator must make a subsequent attempt at repairing the leak, or retrofit or retire the leaking component(s), in its/their entirety, within 14 days of the failed verification. If the refrigerant leak verification test is not successful after three successive attempts to repair a refrigerant leak, the owner or operator must submit a retrofit or retirement plan to the Executive Officer or local Air District within 14 days of the failed verification to retrofit or retire the leaking component(s), in its/their entirety.

(3) The owner or operator of a refrigeration or air-conditioning system may have more than 14 days to repair a refrigerant leak, or replace the leaking component(s) if one or more of the following conditions apply:

(A) A certified technician is not available to complete the repair or replace the components(s).

(B) The necessary parts for an appliance component(s) are unavailable and the owner or operator maintains a written statement from the appliance or component manufacturer or distributor stating the unavailability of parts.

(C) The owner or the operator has received approval from the Executive Officer or APCO to permanently retire the entire refrigeration or air-conditioning system from operation or retrofit the entire appliance with a substitute with a lower GWP.

(4) The retirement or retrofit plan that is approved by the Executive Officer or APCO must be maintained on-site at the physical location of the affected refrigeration or air-conditioning system.

(5) The amount of time for owners or operators to complete and verify repairs, prepare, replace components, and implement written retrofit or retirement plans under paragraph (2) of this section is temporarily suspended during the time that an appliance is undergoing system mothballing.

(6) The time for owners or operators to complete repairs, replace components, or fully implement written retrofit or retirement plans will resume on the day the appliance is brought back on-line, indicating that the appliance is no longer undergoing system mothballing.

**(d) Retrofit and retirement plan:** The owner or operator of a refrigeration or air-conditioning system must maintain a dated retrofit or retirement plan that establishes a six-month schedule to retrofit or retire a leaking refrigeration or air-conditioning system.

(1) The retrofit and retirement plan must be approved by the Executive Officer or APCO. The retrofit or retirement plan is approved if the Executive Officer or APCO does not respond within 30 calendar days after the plan is received.

(2) The retrofit and retirement plan must be maintained at the site of a leaking refrigeration or air-conditioning system. If a refrigeration or air-conditioning system is to be retired and replaced, the retirement plan must include information specific to the new refrigeration or air-conditioning system to be constructed or installed, including, but not limited to, the following:

(A) Equipment type

- (B) Equipment manufacturer
- (C) Equipment model or description
- (D) Equipment serial number. An equipment serial number is not required if a refrigeration or air-conditioning system is assembled with multiple components with individual serial numbers.
- (E) Physical location of a refrigeration or air-conditioning system
- (F) Temperature classification – identify equipment as a low temperature system, a medium temperature system, or other
- (G) Type of refrigerant used
- (H) Total refrigerant charge
- (I) A plan for the old refrigeration or air-conditioning system disposition.
- (J) A retrofit plan must include, but is not limited to, the following:
  - 1. Procedure for flushing old refrigerant and lubricant
  - 2. Procedures for changes in lubricants, filters, gaskets, o-rings, and valves
- (K) A detailed timetable, including, but not limited to:
  - 1. The anticipated date to begin the installation, construction, or retrofit of the refrigeration or air-conditioning system.
  - 2. The anticipated date to complete the installation, construction, or retrofit of the refrigeration or air-conditioning system.
  - 3. The anticipated date to submit a registration for operation for the new refrigeration or air-conditioning system.

### **(e) Required Service Practices**

(1) A person maintaining, servicing, or repairing air-conditioning and refrigeration equipment must satisfy all the following requirements:

(A) Must not intentionally disrupt the refrigerant circuit of any refrigeration or air-conditioning system in order to prepare such unit for recycling or disposal, unless an attempt to recover refrigerant is made using certified refrigerant recovery or recycling equipment.

(B) Make a recovery attempt prior to opening the system to atmospheric conditions. Attempts to recover refrigerant must be made even if the person has reason to believe that all refrigerant has been removed or has previously leaked from the system.

(C) Must not use a refrigerant in any refrigeration or air-conditioning system, unless such refrigerant has EPA approval under the Significant New Alternatives Policy (SNAP) program pursuant to Section 612 of the U.S. Clean Air Act.

(D) Must not add a refrigerant charge to a stationary refrigeration or air-conditioning system appliance without making an attempt to repair leaks in the system, excluding a refrigerant charge for seasonal adjustment.

(E) Must hold a current, valid, and applicable certificate issued by the US EPA in accordance with Title 40 of the Code of Federal Regulations, Part 82, Subpart F (Standards for Stationary AC/Refrigerant Service).

(2) A person installing, servicing, modifying, or disposing of any refrigeration or air-conditioning system, must satisfy all of the following requirements:

(A) Recovers the refrigerant using certified refrigerant recovery or recycling equipment for that type of refrigeration or air-conditioning system. Refrigerant may be returned to the refrigeration or air-conditioning system from which it is



recovered from or to another refrigeration or air-conditioning system owned by the same person without being recycled or reclaimed.

(B) Employs procedures for which the certified refrigerant recovery or recycling equipment was approved by the US EPA.

(C) Uses certified refrigerant recovery or recycling equipment as specified by the certified refrigerant recovery or recycling equipment manufacturer, unless the manufacturer's specifications are in conflict with the procedures for the certified refrigerant recovery or recycling equipment approved by the US EPA or Executive Officer.

(D) Satisfies job site evacuation of refrigerants during recycling, recovering, reclaiming, or disposing in accordance with applicable regulations of the US EPA as contained in Part 82, Subpart F, Section 82.156, of Title 40 of the Code of Federal Regulations.

**(f) Reporting and Recordkeeping** - The owner or operator of a facility that contains a refrigeration or air-conditioning system with a full refrigerant charge over or equal to 50 pounds must maintain records and report to the Executive Officer or local Air District as follows:

(1) The owner or operator of a stationary refrigeration or air-conditioning system must annually report to the local Air District or the Executive Officer all refrigeration and air-conditioning service and refrigerant leak repairs completed, refrigerant purchased, and refrigerant shipped for reclamation or destruction during the prior calendar year.

(A) An operator of a refrigeration or air-conditioning system with a full charge greater than or equal to 2000 pounds of high-GWP refrigerant must submit required reports within 60 days after the end of the 2010 calendar year, and within 60 days after the end of each subsequent calendar year.

(B) An operator of a refrigeration or air-conditioning system with a full charge greater than or equal to 200 pounds of high-GWP refrigerant must

submit required reports within 60 days after the end of the 2012 calendar year, and within 60 days after the end of each subsequent calendar year.

(C) An operator of a refrigeration or air-conditioning system with a full charge greater than or equal to 50 pounds of high-GWP refrigerant must submit required reports within 60 days after the end of the 2014 calendar year, and within 60 days after the end of each subsequent calendar year.

(2) A report of refrigeration and air-conditioning service and leak repairs must include each service and refrigerant leak repair that included an additional refrigerant charge equal to or greater than 5 pounds, or one percent of the full charge, whichever amount is greater. The report must include, but is not limited to, the following:

(A) Equipment Manufacturer

(B) Equipment Model or Description

(C) Equipment Serial number. The serial number(s) of the affected equipment or component must be recorded when present and accessible. When the affected equipment or component is part of an assembly without serial number or does not have an individual serial number or is not accessible after assembly, the physical location of the effected equipment must be recorded in enough detail to permit positive identification.

(D) Date leak detected

(E) Date service provided or leak repair completed

(F) Date of initial verification test

(G) Date of follow-up verification test, if applicable

(H) Total additional refrigerant charge of each type of high-GWP refrigerant or refrigerant blend.

- (I) Name of certified technician completing leak repair
  - (J) US EPA certificate number of certified technician completing leak repair.
- (3) A report of refrigerant purchased must include, but not limited to, the following:
- (A) The total quantity in mass of each type of high-GWP refrigerant and refrigerant blend that was purchased.
  - (B) The total quantity in mass of each type of high-GWP refrigerant and refrigerant blend that was charged into a refrigeration or air-conditioning system.
  - (C) The total quantity in mass of each type of high-GWP refrigerant and refrigerant blend that was recovered from a refrigeration or air-conditioning system.
- (4) A report of refrigerant shipped for reclamation or destruction must include, but not limited to, the following:
- (A) Name of facility refrigerant is shipped to.
  - (B) Address facility refrigerant is shipped to.
  - (C) Type of refrigerant or refrigerant blend shipped.
  - (D) Quantity, in pounds, of refrigerant shipped.
  - (E) Date of shipment.
  - (F) Purpose of shipment (e.g., reclamation, destruction).
- (4) The following records must be retained by all facilities for a minimum of 5 years and must be made available to the Executive Officer or APCO upon request.
- (A) Registration to operate required by subsection (a) of this Section.
  - (B) A log of all service and refrigerant leaks and repairs required by subsection (c) of this Section.

(C) Documentation of all leak detection systems, leak inspections, and automatic leak detection system annual audit and calibrations required by subsection (b) of this Section.

(D) Leak reports and logs of leak and repair activities required by subsection (c) of this Section.

(E) Retrofit and retirement plans required by subsection (d).

(F) All reports required by subsection (f) of this Section.

(G) Documentation and invoices of all refrigerant purchases.

(H) Documentation of all shipments of refrigerants for reclamation or destruction, including a transportation bill-of-lading or other transportation document to document all shipment of refrigerants. The documentation must include the following:

1. Name of facility refrigerant is shipped to.
2. Address facility refrigerant is shipped to.
3. Quantity in pounds of refrigerant shipped.
4. Type of refrigerant or refrigerant blend purchased.
5. Date of shipment.
6. Purpose of shipment (e.g. reclamation, destruction).

(I) Documentation of all refrigeration and air-conditioning systems component data, measurements, calculations and assumptions used to determine the full charge.

#### **§ 9XXX4. General Requirements for Refrigerant Use, Sale, and Disposal**

**(a) Required Service Practices:** A person installing, servicing, modifying, or disposing of any refrigeration or air-conditioning system, must meet all of the following requirements

(1) Recovers the refrigerant using certified refrigerant recovery or recycling equipment for that type of refrigeration or air-conditioning system. Refrigerant may be returned to the refrigeration or air-conditioning system from which it is recovered from or to another refrigeration or air-conditioning system owned by the same person without being recycled or reclaimed.

(2) Employs procedures for which the certified refrigerant recovery or recycling equipment was approved by the US EPA or Executive Officer.

(3) Uses certified refrigerant recovery or recycling equipment as specified by the certified refrigerant recovery or recycling equipment manufacturer, unless the manufacturer's specifications are in conflict with the procedures for the certified refrigerant recovery or recycling equipment approved by the US EPA or Executive Officer.

(4) On and after January 1, 2010, a certified technician may service, modify, or dispose only refrigeration or air-conditioning systems, or components, that they are certified to service, modify, or dispose based on their certification type in accordance with Part 82 of Title 40 of the Code of Federal Regulations.

**(b)** On and after January 1, 2010, a person must not sell or distribute any high-GWP refrigerant for use as a refrigerant in a container with a water capacity greater than 2 pounds, and less than 125 pounds, to a certified technician unless:

(1) The refrigerant is sold in a refillable cylinder, or

(2) The refrigerant is sold in a non-refillable cylinder and a deposit of \$35 is collected.

(A) On and after January 1, 2010, a person selling or distributing any high-GWP refrigerant for use as a refrigerant in a container with a water capacity greater than

2 pounds, and less than 125 pounds, and collecting a deposit must meet all the following requirements:

1. Provide proof of purchase that separately identifies the amount of deposit paid pursuant to subsection (b).
2. Pay the certified technician, or their representative, at the time a non-refillable cylinder is returned, a refund in the amount of the deposit specified in this section. Payment of a refund in the amount of the deposit specified is not required if the certified technician, or their representative, does not provide proof of purchase, including proof of payment of a deposit.

(B) A refrigerant distributor may designate additional facilities to receive and store used non-refillable cylinders from certified technicians, and to pay certified technicians, or their representative, refunds specified in this section.

(C) A refrigerant distributor, or designee, must recover any refrigerant remaining in a returned non-refillable cylinder and must use certified refrigerant recovery or recycling equipment. Any refrigerant recovered from a returned non-refillable cylinder must be reclaimed or destroyed.

#### **(b) Prohibitions**

(1) On or after January 1, 2010, a person must not sell, distribute, offer for sale or distribution, or purchase any high-GWP refrigerant for use as a refrigerant in a container greater than two pounds to a person unless:

(A) The buyer is a certified technician pursuant to Part 82 of Title 40 of the Code of Federal Regulations;

(B) The refrigerant is sold only for eventual resale to certified technicians, to air-conditioning or refrigeration appliance manufacturers, or the refrigerant is being sent for reclamation; or

(C) The refrigerant is contained in a refrigeration or air-conditioning system.

(2) A person must not sell used refrigerant to a new owner for use as a refrigerant unless the used refrigerant has first been reclaimed by a US EPA-certified refrigerant reclaimer.

(3) A person must not sell or distribute or offer to sell or distribute any refrigerant for any refrigeration or air-conditioning system unless such refrigerant has US EPA approval under the Significant New Alternatives Policy (SNAP) program pursuant to Section 612 of the U.S. Clean Air Act.

(4) A person must not intentionally disrupt the refrigerant circuit of any refrigeration or air-conditioning system in order to prepare such unit for recycling or disposal, unless an attempt to recover refrigerant is made while properly using certified refrigerant recovery or recycling equipment.

(5) A certified technician, certified reclaimer, refrigerant distributor, or refrigerant wholesaler must not dispose of a cylinder in California used to store or transport high-GWP refrigerant unless the disposal or recycling facility accepting the cylinder evacuates the cylinder under vacuum and delivers recovered refrigerant to an EPA certified refrigerant reclaimer.

(6) A person must not distribute or sell certified refrigerant recovery or recycling equipment unless such equipment meets all of the requirements of ARI Standard 740 and has been independently tested to meet the requirements of the standard by Underwriters Laboratories (UL) or the Air Conditioning, Heating and Refrigeration Institute (AHRI).

(7) A person must not refill a non-refillable cylinder or use it as a temporary receiver during service.

(8) A person must not repair or modify a non-refillable cylinder in any way to allow the non-refillable cylinder to be refilled.

### **(c) Reporting and Recordkeeping**

(1) Refrigerant distributor and wholesaler annual reporting: a person distributing or wholesaling a high-GWP refrigerant must submit a report to the Executive Officer within 60 days after the end of the 2010 calendar year, and within 60 days after the end of each subsequent calendar year. An annual report must include, but is not limited to, the following information:

- (A) The total quantity in mass of each type of high-GWP refrigerant and refrigerant blend that was shipped to service technicians and contractors.
- (B) The total quantity in mass of each type of high-GWP refrigerant and refrigerant blend that was shipped to a certified refrigerant reclaimer.
- (C) The total number of non-refillable cylinders sold and total deposits collected
- (D) The total number of non-refillable cylinders received for a return on a deposit and total paid in deposits.

(2) Refrigerant reclaimer annual reporting: a person reclaiming, recovering, or recycling a high-GWP refrigerant must submit a report to the Executive Officer within 60 days after the end of the 2010 calendar year, and within 60 days after the end of each subsequent calendar year. An annual report must include, but is not limited to, the following information:

- (A) The total quantity in mass of each type of high-GWP refrigerant and refrigerant blend that was collected for reclamation.
- (B) The total quantity in mass of each type of high-GWP refrigerant and refrigerant blend that was collected for destruction.
- (C) The total quantity in mass of each type of high-GWP refrigerant and refrigerant blend that was reclaimed.



(D) The total quantity in mass of each type of high-GWP refrigerant and refrigerant blend that was destroyed.

(E) The total number of non-refillable cylinders sold and total deposits collected

(F) The total number of non-refillable cylinders received for a return on a deposit and total paid in deposits.

(G) A record of transactions for each type of recovered high-GWP refrigerant or refrigerant blend that was received from a certified technician, contractor, or other source. The record of transactions must include, but is not limited to, the following information:

1. Name of certified technician, contractor, or other source.
2. Address certified technician, contractor, or other source.
3. Type of refrigerant or refrigerant blend received.
4. Quantity in pounds of refrigerant received.
5. Date of receipt.
6. Purpose of receipt (e.g., reclamation, destruction).

(3) The following records must be retained by all refrigerant distributors and wholesalers for a minimum of 5 years and must be made available to the Executive Officer upon request.

(A) Annual reports required by subsection (g) of this Section.

(B) Documentation and invoices of all refrigerant sales.

(C) Documentation of all shipments of refrigerants (including a transportation bill-of-lading or other transportation document) to document all shipment of refrigerants. The documentation must include, but is not limited to, the following:

1. Name of facility refrigerant is shipped to.

2. Address facility refrigerant is shipped to.
3. Type of refrigerant or refrigerant blend received.
4. Quantity, in pounds, of refrigerant shipped.
5. Date of shipment.

(4) The following records must be retained by all certified reclaimers for at least 5 years and must be made available to the Executive Officer upon request.

(A) Annual reports required by subsection (g) of this Section.

(B) Documentation and invoices of all refrigerant purchases and sales.

(C) Documentation of all shipments of refrigerants, including a transportation bill-of-lading or other transportation document. The documentation must include, but is not limited to, the following:

1. Name of facility refrigerant is shipped to.
2. Address facility refrigerant is shipped to.
3. Type of refrigerant or refrigerant blend received.
4. Quantity in pounds of refrigerant shipped.
5. Date of shipment.

#### **§ 9XXX5. Confidentiality.**

(a) All stationary refrigeration and air-conditioning system service and leak repair, refrigerant purchase, and refrigerant shipments for reclamation and destruction reporting submitted to the Executive Officer under this article is public information and shall not be designated as confidential.

(b) Except as provided in subsection (a), any person submitting information to the Executive Officer pursuant to this article may designate such information that is not refrigeration and air-conditioning service and leak repair, refrigerant purchase, and refrigerant shipments for reclamation and destruction reporting as confidential because it is a trade secret or otherwise exempt from public disclosure under the California Public Records Act (Government Code section 6250 et seq.). All such requests for confidentiality shall be handled in accordance with the procedures specified in title 17, California Code of Regulations, sections 91000 to 91022.

#### **§ 9XXX6. Enforcement**

(a) If the Executive Officer or APCO finds any facility owner or operator, certified technician, certified reclaimer, refrigerant distributor, or refrigerant wholesaler does not comply with the requirements of this Article, the Executive Officer or APCO may assess penalties to the extent permissible under Chapter 1.5 of Part 5, Division 26 of the Health and Safety Code commencing with Section 42400.

(b) Before seeking remedial action against any certified technician, certified reclaimer, refrigerant distributor, or refrigerant wholesaler the Executive Officer or APCO will consider any information provided by the certified technician, certified reclaimer, refrigerant distributor, or refrigerant wholesaler.